T AND TRADEMARK OFFICE IN THE UNITED STATES

In re application of: Sara Lavi FEB 1 5 2000 Group Art Unit: 1632 09/029,479 Serial No.: Examiner: Woitach, J 10/21/98 Filed: MANIPULATION AND DETECTION OF PROTEIN PHOSPHATEASE 2C-For: PP2CALPHA - EXPRESSION IN TUMOR CELLS FOR CANCER THERAPY, PREVENTION AND DECTECTION **Box Sequence Assistant Commissioner for Patents** Washington, DC 20231 SUBMISSION OF SEQUENCE LISTING/STATEMENT This replies to the communication from the Examiner in charge of this 1. application, Paper No. 7, dated December 2, 1999. X A copy of the communication is enclosed. I, Amy E. Rinaldo, state the following: 2. Submitted herewith is/are: 3. A. Sequence Listing(s) for the nucleotide and/or amino acid sequence(s). Each sequence Listing is assigned a separate identifier. B. A copy of each Sequence Listing submitted for this Χ application in computer readable form. C. Preliminary Amendment inserting the Sequence Listing into the application. CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a) and 1.10 I hereby certify that on the date shown below this correspondence is being deposited with the United States Postal Service in an envelope addressed to: Box Sequence List, Assistant Commissioner for Patents, Washington, DC 20231 37 CFR 1.10* 37 CFR 1.8(a) as "Express Mail Post Office to Addressee" X sufficient postage as first class mail.

Mailing Label No.

DATED: February 9, 2000

U.S.S.N. 09/029,479

STATEMENT THAT SEQUENCE LISTING AND COMPUTER READABLE COPY ARE THE SAME

I hereby state that each computer readable form submitted in this application is the same as the Sequence Listing to which it is indicated to relate.

I hereby state that all papers accompanying this submission, or for which a request for transfer from Applicants' other application, introduce no new matter.

The Commissioner is authorized to charge any fee or credit any overpayment in connection with this communication to our Deposit Account No. 11-1449.

Respectfully submitted,

KOHN & ASSOCIATES

Amy E. Rinaldo

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Date: February 9, 2000

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PAGE: 1

RAW SEQUENCE LISTING PATENT APPLICATION US/09/029,479

DATE: 03/11/2000 TIME: 03:35:52

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This Raw Listing contains the General Information Section and up to the first 5 pages.

ENTERED SEQUENCE LISTING 1 2 General Information: 3 (1) 4 (i) APPLICANT: Lavi, Sara 5 6 (ii) TITLE OF INVENTION: MANIPULATION AND DETECTION OF PROTEIN 7 PHOSPHATASE 2C -PP2CALPHA- EXPRESSION IN TUMOR CELLS FOR 8 CANCER THERAPY, PREVENTION AND DETECTION 9 10 (iii) NUMBER OF SEQUENCES: 20 11 12 (iv) CORRESPONDENCE ADDRESS: 13 (A) ADDRESSEE: Kohn & Associates 14 (B) STREET: 30500 Northwestern Hwy. 15 (C) CITY: Farmington Hills 16 (D) STATE: Michigan 17 (E) COUNTRY: US 18 (F) ZIP: 48334 19 20 (v) COMPUTER READABLE FORM: 21 (A) MEDIUM TYPE: Floppy disk 22 (B) COMPUTER: IBM PC compatible 23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS 24 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 25 26 (vi) CURRENT APPLICATION DATA: 27 (A) APPLICATION NUMBER: 28 (B) FILING DATE: 29 (C) CLASSIFICATION: 30 31 (viii) ATTORNEY/AGENT INFORMATION: 32 (A) NAME: Kohn, Kenneth I. 33 (B) REGISTRATION NUMBER: 30,955 34 (C) REFERENCE/DOCKET NUMBER: 2290.00037 35 36 (ix) TELECOMMUNICATION INFORMATION: 37 (A) TELEPHONE: (810) 539-5050 38 (B) TELEFAX: (810) 539-5055 39 40 41 (2) INFORMATION FOR SEQ ID NO:1: 42 43 (i) SEQUENCE CHARACTERISTICS: 44 (A) LENGTH: 10 amino acids 45

(B) TYPE: amino acid

46

RAW SEQUENCE LISTING PATENT APPLICATION US/09/029,479

DATE: 03/11/2000 TIME: 03:35:52

47 48			(C) STRANDEDNESS: single(D) TOPOLOGY: linear		
49 50		(44)	MOLECULE TYPE: peptide		
51		(11)	MODECODE III. populac		RECEIVED TO TO 1800 TO
52 53					京易 3
54				_	5 2 2
55 56		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:	1:	至马巴
57			Asp Asp Thr Asp Ser Ala Ser Thr		
58 59		1	5	10	00,
60	(2)	INFO	RMATION FOR SEQ ID NO:2:		
61 62	•	(i)	SEQUENCE CHARACTERISTICS: (A) LENGTH: 15 amino acids		
63 64			(B) TYPE: amino acid		
65			(C) STRANDEDNESS: single		
66 67			(D) TOPOLOGY: linear		
68		(ii)	MOLECULE TYPE: peptide		
69 70					
71					
72 73		(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:	2:	
74					. Т
75 76		Tyr 1	Lys Asn Asp Asp Thr Asp Ser Thr	ser Thr Asp Asp Me 10	15
77					
78 79	(2)	INFO	RMATION FOR SEQ ID NO:3:		
80		(i)	SEQUENCE CHARACTERISTICS:		
81 82			(A) LENGTH: 9 amino acids(B) TYPE: amino acid		
83			(C) STRANDEDNESS: single		
84 85			(D) TOPOLOGY: linear		
86		(ii)	MOLECULE TYPE: peptide		
87 88					
89					
90 91		(vi)	SEQUENCE DESCRIPTION: SEQ ID NO:	3:	
92			•		
93 94		Pro 1	Asn Lys Asp Asn Asp Gly Gly Ala		
94 95		Τ.	3		
96	(2)	INFO	RMATION FOR SEQ ID NO:4:		
97 98		(i)	SEQUENCE CHARACTERISTICS:		
99			(A) LENGTH: 20 base pairs		

RAW SEQUENCE LISTING PATENT APPLICATION US/09/029,479

DATE: 03/11/2000 TIME: 03:35:52

100 101 102 103	(B) TYPE: nucleic acid(C) STRANDEDNESS: single(D) TOPOLOGY: linear						
104 105 106 107	<pre>(ii) MOLECULE TYPE: other nucleic acid (A) DESCRIPTION: /desc = "Primer"</pre>						
108							
109	/ '\ CHOVENCE BECCRIPTION, CEO ID NO.4.						
110	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:						
111 112	леслиеллен санаанееса 20						
113	AGGATCAAGT CATAATGGGA 20						
114	(2) INFORMATION FOR SEQ ID NO:5:						
115	(2) INFORMATION FOR BEG 15 NO. 5.						
116	(i) SEQUENCE CHARACTERISTICS:						
117	(A) LENGTH: 20 base pairs						
118	(B) TYPE: nucleic acid						
119	(C) STRANDEDNESS: single						
120	(D) TOPOLOGY: linear						
121							
122	(ii) MOLECULE TYPE: other nucleic acid						
123	(A) DESCRIPTION: /desc = "Primer"						
124							
125	(iv) ANTI-SENSE: YES						
126							
127							
128							
129							
130	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:						
131							
132	GCTGGAGTCT GATTTACAAC	20					
133							
134	(2) INFORMATION FOR SEQ ID NO:6:						
135							
136	(i) SEQUENCE CHARACTERISTICS:						
137	(A) LENGTH: 18 base pairs						
138	(B) TYPE: nucleic acid						
139	(C) STRANDEDNESS: single						
140	(D) TOPOLOGY: linear						
141	(ii) worngure mype, other sugleic agid						
142	(ii) MOLECULE TYPE: other nucleic acid						
143	(A) DESCRIPTION: /desc = "Primer"						
144 145							
145 146							
146							
147	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:						
148	(VI) PHÖORMON PHROUTITION. PHÁ IR MO.O.						
150	GAAGTAGTCG ACACCTGT	18					
151	0.2.00.0.						
	(2) INFORMATION FOR SEQ ID NO:7:						
152	(2) INFORMATION FOR SEC ID NO:/:						

RAW SEQUENCE LISTING PATENT APPLICATION US/09/029,479

DATE: 03/11/2000 TIME: 03:35:53

154		
	(i) SEQUENCE CHARACTERISTICS:	
155	(A) LENGTH: 21 base pairs	
156	(B) TYPE: nucleic acid	
157	(C) STRANDEDNESS: single	
158	(D) TOPOLOGY: linear	
159	(11)	
160	(ii) MOLECULE TYPE: other nucleic acid	
161	(A) DESCRIPTION: /desc = "Primer"	
162		
163		
164		
165	(I)	
166	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:	
167		21
168	GTTTGAGACC TTCAACACCC C	21
169		
170	(2) INFORMATION FOR SEQ ID NO:8:	
171		
172	(i) SEQUENCE CHARACTERISTICS:	
173	(A) LENGTH: 23 base pairs	
174	(B) TYPE: nucleic acid	
175	(C) STRANDEDNESS: single	
176	(D) TOPOLOGY: linear	
177		
178	(ii) MOLECULE TYPE: other nucleic acid	
179	(A) DESCRIPTION: /desc = "Primer"	
180		
181		
182		
183		
183 184	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:	
183 184 185		22
183 184 185 186	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8: GTGGCCATCT CTTGCTCGAA GTC	23
183 184 185 186 187	GTGGCCATCT CTTGCTCGAA GTC	23
183 184 185 186 187 188		23
183 184 185 186 187 188 189	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9:	23
183 184 185 186 187 188 189	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS:	23
183 184 185 186 187 188 189 190	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids	23
183 184 185 186 187 188 189 190 191	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid	23
183 184 185 186 187 188 189 190 191 192 193	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single	23
183 184 185 186 187 188 189 190 191 192 193	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid	23
183 184 185 186 187 188 189 190 191 192 193 194 195	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	23
183 184 185 186 187 188 189 190 191 192 193 194 195	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9: Met Gly Ala Phe Leu Asp	23
183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202	GTGGCCATCT CTTGCTCGAA GTC (2) INFORMATION FOR SEQ ID NO:9: (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 6 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear (ii) MOLECULE TYPE: peptide (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:	23

RAW SEQUENCE LISTING PATENT APPLICATION US/09/029,479

DATE: 03/11/2000 TIME: 03:35:53

				INPULSEL: 333010.10	ı w	
206	(2)	INFORMA	TION FOR SEQ ID NO:10:			
207		(÷) an	QUENCE CHARACTERISTICS:			
208			A) LENGTH: 28 base pairs			
209			B) TYPE: nucleic acid			
210		-				
211			C) STRANDEDNESS: single			
212		(D) TOPOLOGY: linear			
213						
214			LECULE TYPE: other nucleic acid			
215		(A) DESCRIPTION: /desc = "Primer"			
216						
217						
218						
219						
220		(xi) SE	QUENCE DESCRIPTION: SEQ ID NO:10:			
221						
222	CGG	GATCCGC	ATGGGAGCAT TTTTAGAC		28	
223						
224	(2)	INFORMA	TION FOR SEQ ID NO:11:			
225	ν-,			•		
226		(i) SE	QUENCE CHARACTERISTICS:			
227			A) LENGTH: 5 amino acids			
228			B) TYPE: amino acid			
229		•	C) STRANDEDNESS: single			
			D) TOPOLOGY: linear	•		
230		,	D) TOPOLOGI: IIIIeal			
231		(44) 200	TEGULE EVER . montido			
232		(11) MO	LECULE TYPE: peptide			
233						
234						
235						
236						
237		(xi) SE	QUENCE DESCRIPTION: SEQ ID NO:11:			
238						
239		Thr As	p Asp Met Trp			
240		1	5			
241						
242	(2)	INFORMA	TION FOR SEQ ID NO:12:			
243						
244		(i) SE	QUENCE CHARACTERISTICS:			
245		(A) LENGTH: 27 base pairs			
246		(B) TYPE: nucleic acid			
247			C) STRANDEDNESS: single			
248			D) TOPOLOGY: linear			
249		·	_,			
250		(ii) MO	LECULE TYPE: other nucleic acid			
251			A) DESCRIPTION: /desc = "Primer"			
252		,	,, ,			
253						
254						
25 4 255						
⊿55 256		/vi\ a=	QUENCE DESCRIPTION: SEQ ID NO:12:			
		(XI) SE	QUENCE DESCRIPTION. SEQ ID NO.12.			
257	000	70 x m00m	TACCACATAT CATCACT		27	
258	CGCGGATCCT TACCACATAT CATCAGT					

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